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EXAMINER

HAN, JASON

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/651,273	Applicant(s) GENNRICH ET AL.	
	Examiner Jason M Han	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☒ Claim(s) 1 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/28/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: laminar formation 78 [Page 8, Paragraph 34, Line 1; Page 9, Paragraph 38, Lines 3-4; Page 10, Paragraph 40, Lines 3, 6; Page 10, Paragraph 41, Lines 3-4]. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:
- a. Page 7, Paragraph 30, Lines 13-14: Typographical error – should read as "in a similar manner to the openings 75";
 - b. Page 7, Paragraph 32, Line 5: Typographical error – "this" should be capitalized;
- Appropriate correction is required.

Claim Objections

3. Claim 1 is objected to because of the following informalities: Applicant recites the limitation "said guide plate" in line 20 of the claim. There is insufficient antecedent basis for this limitation in the claim. Applicant has failed to distinctly claim either the said "rotational guide plate" or "translational guide plate". Appropriate correction is required, and the examiner has assumed the most logical interpretation.
4. Claim 26 is objected to because of the following informalities: Applicant should remain consistent with language, wherein "said shutter plate" in lines 4, 7, 13, and 14 of the claim should read as "said shutter blade" as recited earlier in line 3 of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by Reinert (U.S. Patent 6550939).

Reinert discloses a light beam shutter apparatus including:

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- a stack of circular disks [Figures 11-14: (18, 19, 28, 29, 38, 39, 48, 50, 52, 54, 60)] made of sheet material, whereby the disks are mounted for rotation around a common axis and have aligned central openings defining a light path for a beam of light;
- a plurality of shutter blades [Figures 11-14: (10, 20, 30, 40)];
- a first plurality of the disks [Figures 11-14: (18, 28, 38, 48)] having recesses [Figure 11: (181-183)] supporting the shutter blades for movement into and out of the light path; and
- a second plurality of the disks [Figures 11-14: (19, 29, 39, 50, 52, 54, 60)] having drive members [Figures 13-14: (61-68)] engaging the shutter blades.

6. Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Lange (U.S. Patent 4395104).

Lange discloses a shutter assembly including:

- a shutter blade [Figures 1-5: (6)];
- a first guide plate [Figures 1-5: (3)] having a slot [Figures 1-5: central hole defined in (3)] capturing the shutter plate in an orientation coplanar with the first guide plate [Column 2, Lines 61-64];
- a light path extending through the slot, whereby the slot holds the shutter blade for sliding movement relative to the light path [Column 2, Lines 61-68];
- a second guide plate [Figures 1-5: (1)] parallel to the first guide plate;
- a plate mounting structure [Figures 1-5: (14)] mounting the first and second guide plates for simultaneous and for independent rotation; and

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- first [Figures 1-5: (9)] and second [Figures 1-5: (8)] cam elements defined respectively on the second guide plate and on the shutter blade; whereby the cam elements engage one another for sliding the shutter blade in the slot in response to rotation of the first guide plate relative to the second guide plate [Column 2, Lines 61-68].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinert (U.S. Patent 6550939) in view of Steineck (U.S. Patent 2625087).

8. With regards to Claim 1, Reinert discloses a light beam shutter apparatus including:

- a stack of plates [Figure 12: (18, 19, 28, 29, 38, 39, 48, 50, 52)] having aligned central openings defining a light path through the shutter apparatus, the light path having a longitudinal axis, a plurality of said plates [Figure 12: (18, 19, 28, 29, 38, 39, 48, 50, 52)] being mounted for rotation around the longitudinal axis;
- a shutter blade [Figure 12: (10, 20, 30, 40); Figure 11: (10)];
- a first of said plurality of plates [Figure 11: (18)] being a rotation guide plate having a guide slot [Figure 11: (181-183)] extending from the central opening

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of the rotation guide plate, wherein the guide slot receives the shutter blade such that translational motion into and out of said central opening is provided for blocking a portion of the light path; and

- a second of said plurality of plates being a translation guide plate [Figure 11: (50)].

Reinert does not specifically teach a cam and follower combination, wherein a first camming element is on the translation guide plate and a second camming element is on the shutter blade engaging the first camming element and moving the shutter blade along the guide slot in response to rotation of the translation guide plate relative to rotation of the rotation guide plate.

Steineck teaches such a cam follower combination wherein a first camming element [Figure 2: (76)] is disposed on a light screen disc [Figure 2: (19)] and a second camming element [Figure 2: (78)] is on a first cover disc [Figure 2: (18)], so that the second element engages the first element in response to rotation of the light screen disc relative to rotation of the first cover disc.

It would have been obvious to modify the light beam shutter apparatus of Reinert to incorporate the cam and follower combination of Steineck in order to rotate the translation guide plate, and subsequently the shutter blade so as to produce another degree of rotation for the illumination. Such a configuration is commonly known within the art, whereby a cam follower is a simple means of providing rotation.

9. With regards to Claim 2, Reinert in view of Steineck discloses the claimed invention as cited above. In addition, Steineck teaches the first and second camming

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elements including a cam follower projection [Figure 2: (78)] that is received within an arcuate slot [Figure 2: (76)] for rotation.

10. With regards to Claim 3, Reinert in view of Steineck discloses the claimed invention as cited above. In addition, Reinert teaches the shutter blade [Figure 11: (10)] being coplanar with the rotation guide plate [Figure 11: (18)].

11. With regards to Claim 4, Reinert in view of Steineck discloses the claimed invention except for the shutter blade, rotation guide plate, and the translation guide plate being made of sheet metal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated sheet metal in the abovementioned components, since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. In this case, metal is considered an obvious engineering decision with respect to availability, low cost, and good thermal conductivity.

12. With regards to Claim 5, Reinert in view of Steineck discloses the claimed invention. In addition, both Reinert [Figure 12] and Steineck [Figure 2] teach a plurality of plates having the same thickness. It also would have been an obvious matter of design choice to incorporate equal thicknesses, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). In this case, one would want to ensure similar thicknesses so as to simplify manufacturing.

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13. With regards to Claim 6, the method of forming a device is not germane to the issue of the device itself. Therefore, the limitation "being made from a single piece of sheet metal" has not been given patentable weight. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the shutter blade, rotation guide plate, and translation guide plate out of sheet metal, since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. In this case, metal is considered an obvious engineering decision with respect to availability, low cost, and good thermal conductivity.

14. Claims 7-11 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinert (U.S. Patent 6550939).

15. With regards to Claim 7, Reinert discloses a light beam shutter apparatus including:

- a plurality of rings [Figure 12: (19, 29, 39)] having circular central openings, whereby the rings are in a laminar formation with the circular central openings are aligned to define a circular cylindrical nest;
- a stack of a plurality of circular plates [Figure 12: (18, 28, 38, 48)] rotatably received in the nest, whereby the plates have central apertures aligned to define a light path;

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- four of the circular plates being shutter guide plates [Figure 12: (18, 28, 38, 48)] having guide slots [Figure 11: (181-183)] extending outward from the central apertures; and
- four shutter blades [Figure 12: (10, 20, 30, 40)] that are received and slide in the guide slots for movement into and out of the light path.

Reinert does not specifically teach the plurality of rings and the plurality of circular plates being made out of sheet metal. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the rings and plates out of sheet metal, since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. In this case, metal is considered an obvious engineering decision with respect to availability, low cost, and good thermal conductivity.

16. With regards to Claim 8, Reinert discloses the claimed invention as cited above except for the plurality of rings being equal in number to the plurality of circular plates. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have duplicated the number of rings to equal the number of circular plates, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

17. With regards to Claim 9, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches the rings and circular plates having the same thickness [Figure 12].

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18. With regards to Claim 10, Reinert discloses the claimed invention as cited above, as well as the shutter blades having the same thickness as the circular plates [Figures 11-12]. Reinert does not specifically teach the shutter blades being made out of sheet metal. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the shutter blades out of sheet metal, since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. In this case, metal is considered an obvious engineering decision with respect to availability, low cost, and good thermal conductivity.

19. With regards to Claim 11, the method of forming a device is not germane to the issue of the device itself. Therefore, the limitation "being made from a single piece of sheet metal" has not been given patentable weight. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the shutter blade, rotation guide plate, and translation guide plate out of sheet metal, since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

20. With regards to Claim 17, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches each metal ring having a drive member receiving recess [Figures 11-14: holes defined in rings (19, 29, 39)] adjoining the circular central opening, and a plurality of drive members [Figures 11-14: (16, 17, 26, 27, 36, 37)] each received

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on one of the drive member receiving recesses and engaging a periphery of one of the circular plates [Figures 11, 14].

21. With regards to Claim 18, Reinert discloses the claimed invention as cited above. In addition, Reiner teaches the circular plates having peripheral gear teeth [Figure 11: (14-15)] and the drive members [Figures 11-14: (16, 17, 26, 27, 36, 37)] including pinion gears meshed with the gear teeth. It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the pinion gears out of sheet metal, since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

22. With regards to Claim 19, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches all of the sheet metal rings being identical [Figure 12: (19, 29, 39)].

23. With regards to Claim 20, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches the rings [Figure 12: (19, 29, 39)] being oriented in the laminar formation so that the drive member receiving recesses are arrayed peripherally around the circumference of the nest [Figure 14].

24. With regards to Claim 21, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches a pair of end plates [Figure 12, (50, 52)] attached to opposite ends of the nest to retain the circular plates in the nest, wherein the end plates have central apertures aligned with the light path, a plurality of drive openings extending through the laminar formation intersecting the drive member receiving recesses [as best

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seen in Figure 14], and a plurality of motors [Figures 13-14: (61-68)] mounted adjacent at least one of the end plates and having drive shafts extending through the drive openings and connected to the drive members.

25. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinert (U.S. Patent 6550939) as applied to Claim 7 above, and further in view of Steineck (U.S. Patent 2625087).

26. With regards to Claim 12, Reinert discloses the claimed invention as cited above, but does not specifically teach another four of the circular plates being shutter drive plates having cam structures, and the shutter blades having cam followers mating the cam structures.

Steineck teaches such a cam follower combination wherein a first camming element [Figure 2: (76)] is disposed on a light screen disc [Figure 2: (19)] and a second camming element [Figure 2: (78)] is on a first cover disc [Figure 2: (18)], so that the second element engages the first element in response to rotation of the light screen disc relative to rotation of the first cover disc.

It would have been obvious to modify the light beam shutter apparatus of Reinert to incorporate the cam follower combination of Steineck in order to rotate the shutter guide plate, and subsequently the shutter blade so as to produce another degree of rotation for the illumination. Such a configuration is commonly known within the art, whereby a cam follower is a simple means of providing rotation.

27. With regards to Claim 13, Reinert in view of Steineck discloses the claimed invention as cited above except for shutter guide plates being adjacent to one another in

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the stack. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have placed the shutter guide plates next to each other, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70. In this case, it is obvious that the references teach a functionally equivalent device with the exception of the exact disposition of the shutter guide plates.

28. With regards to Claim 14, Reinert in view of Steineck discloses the claimed invention as cited above. In addition, Reinert teaches the shutter guide plates [Figure 12: (28)] being sandwiched between a pair of plates [Figure 12: (19, 29)]. It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have sandwiched the shutter guide plates between pairs of shutter drive plates, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

29. With regards to Claim 15, Reinert in view of Steineck discloses the claimed invention as cited above. In addition, Reinert teaches a pair of end plates [Figure 12, (50, 52)] attached to opposite ends of the nest to retain the circular plates in the nest, wherein the end plates have central apertures aligned with the light path.

30. With regards to Claim 16, Reinert in view of Steineck discloses the claimed invention as cited above. In addition, Reinert teaches two pairs of identical circular plates [Figure 12: (18, 28, 38, 48)]. It also would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate two pairs of identical shutter drive plates, since it has been held that mere duplication of the

essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In this case, it is an obvious engineering decision that one would want to incorporate an identical number of shutter drive plates in order to provide rotation to all of said shutter guide plates.

31. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinert (U.S. Patent 6550939) as applied to Claim 22 above.

32. With regards to Claim 23, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches a driver [Figures 13-14: (69)] for rotating the disks, but does not specifically teach a plurality of said drivers. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement a plurality of drivers, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In this case, it is an obvious engineering decision to implement a plurality of drivers in order to provide independent rotation for each of the disks.

33. With regards to Claim 24, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches the driver including a motor [Figures 13-14: (69); Column 9, Lines 16-20].

34. With regards to Claim 25, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches a plurality of drive motors [Figures 11-14: (61-68)] and a plurality of drive members [Figure 13: (16, 17, 26, 27, 36, 37)] coupled between the drive motors and the disks.

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35. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinert (U.S. Patent 6550939).

36. With regards to Claim 27, Reinert discloses a light beam shutter apparatus providing:

- a plurality of shutter blades [Figures 11-14: (10, 20, 30, 40)];
- a plurality of rotation guide plates [Figures 11-14: (18, 28, 38, 48)] having central openings and guide slots [Figures 11-14: (181-183)] for receiving and loading the shutter blades;
- a plurality of translation guide plates [Figures 11-14: (19, 29, 39, 50, 52)] having central openings aligned with the central openings of the rotation guide plates, wherein the translation guide plates define holes including cams [Figures 11-14: (16, 17, 26, 27, 36, 37)] for translating the shutter blades.

Reinert does not specifically teach the above components being made out of a single sheet of metal. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the sheet metal, since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. In this case, metal is considered an obvious engineering decision with respect to availability, low cost, and good thermal conductivity.

37. With regards to Claim 28, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches a ring member [Figures 11-14: (60)] that receives a stack of the rotation and translation guide plates to form a nest [Figure 14]. It also would have

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been obvious to one having ordinary skill in the art at the time the invention was made to duplicate the ring, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In this case, providing a plurality of rings could protect and secure the stack of rotation and translation guide plates by surrounding them within the nest, as well as provide independent rotation for each of the plates [Figure 13: (51, 69, 70) – duplication of these components would be required as well].

38. With regards to Claim 29, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches providing gear teeth [Figures 11-14: (51)] on the periphery of a plate(s) [duplication supported in the abovementioned rejection], whereby a pinion gear [Figures 11-14: (70)] meshes with the gear teeth to provide rotation of the plate(s) [Column 9, Lines 20-21].

39. With regards to Claim 30, Reinert discloses the claimed invention as cited above. In addition, Reinert teaches some of the plates acting as end plates [Figures 11-14: (50, 52)] wherein the stack of rotation and translation guide plates are retained there between.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are further cited to show the state of the art pertinent to the current application, but are not considered exhaustive:


US Patent 4208100 to Bischl;	US Patent 4210955 to Labrum;
US Patent 4811182 to Solomon;	US Patent 5264885 to Haraguchi et al;
US Patent 5510969 to Rodger et al;	US Patent 5571280 to Lehrer;
US Patent 6092914 to Esakoff et al;	US Patent 6102554 to Wynn Eillson et al;
US Patent 6744693 to Brockmann et al;	US Patent 6873596 to Tanaka et al;
US Patent 5653519 to Dobbs.	

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (1/28/2005)


JOHN ANTHONY WARD
PRIMARY EXAMINER